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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,205	02/03/2004	Christopher W. Brumme	MS1-1821US	4224
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LEE & HAYES PLLC 601 W Riverside Avenue Suite 1400 SPOKANE, WA 99201			EXAMINER GEE, JASON KAI YIN	
			ART UNIT 2434	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/772,205	<b>Applicant(s)</b> BRUMME ET AL.	
	<b>Examiner</b> JASON K. GEE	<b>Art Unit</b> 2434	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 39 and 40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 and 41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/07/2004</u> .  | 6) <input type="checkbox"/> Other: _____                          |

***DETAILED ACTION***

1. This action is response to communication: response to election/restriction received 10/03/2008, with acknowledgement of filing date of 02/03/2004.
2. Claims 1-41 are currently pending in this application.
3. The IDS received 06/07/2004 has been accepted.

***Election/Restrictions***

4. Applicant's election without traverse of Group 1 (claims 1-38 and 41) in the reply filed on 10/03/2008 is acknowledged.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claims 1-38 and 41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 1-38 and 41, the independent claims recite a process of allowing or disallowing a call based upon a configuration of the first said method. However, the claim continues on to claim a rule to always allow any said call from any said managed code caller to the first said method. This rule seems to always allow any call, no matter what the circumstances, and it does not seem to be based upon a configuration of the first said method. It is therefore unclear how a rule always allows any calls from any

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said managed code caller when allowing calls is based upon the configuration of the method it is calling.

Also, as per claims 1-38 and 41, the independent claim recites the term "allowing" throughout the claim. A method "allowing" an action to happen indicates that the method is not prohibiting the action from happening. It is unclear what the intended metes and bounds are, since none of the recited steps include any positive or active action to occur, only permissive actions. Thus, anything that doesn't stop these things from occurring appears to meet the claim limitations.

As per claim 4, the claim recites "throwing an exception ... and: the call that is never allowed; or the level of trust attributed ... and required by the first said method." The claim, as written, does not make much sense, as there seems to be incorrect punctuation or missing words in the sentences. The applicants are strongly recommended to correct all the mistakes in this sentence to make clearly understandable claim.

As per claim 11 and 12, the claim recites the scenario when a determination is affirmative. It is unclear what the invention would be directed to if the determination is not affirmative.

As per claim 15, the claims recite the instance when the call is permissible. It is unclear what the invention would be directed to if the instance was not permissible.

As per claim 19 and 20, the claim recites the scenario when a derivation is affirmative. It is unclear what the invention would be directed to if the derivation is not affirmative.

Claims 18 and 33 are rejected using the same basis of arguments used to reject claim 4 above.

As per claims 29-39, independent claim recites "one of more methods in a shared managed library." It is unclear whether the Applicants intend this to be "one of more methods" or "one or more methods." The claims will be interpreted for now as "on or more methods."

As per claim 37, the claim recites "wherein the intermediate language code and metadata generated by the language compiler from one or more files each having a file type and being associated with user code." There are words missing in this claim and the limitations of this claim are not clear.

### ***Claim Rejections - 35 USC § 101***

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-38 and 41 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As per claims 1-13, the claims are directed to allowing or disallowing a call based upon a configuration of the first said method with a hosting rule selected from a set of groups. However, the claims do not claim using any of these rules at all. This is evidenced by claim 11, wherein the claim recites determining whether the host will use any said hosting rule in allowing a call from any said managed code caller to any said

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method. Therefore, as the claims are directed to a mere set of rules that are not necessarily used, and no useful, concrete, or tangible result is created.

As per claims 14-21, the claims are directed to a method of intercepting a call and deriving whether the call is permissible according to the host's prior configuration of a plurality of said managed callees. As seen through the claim limitations, the claims merely intercept a call and derive whether a call is permissible or not. Nothing is being done after the system makes a determination whether a call is permissible or not. Nothing is actively being done that creates any useful, concrete, or tangible result.

Also, as per claims 14-21, the claims seem to do nothing more than intercepting calls. The claims do not claim using any of these rules at all. This is evidenced by claim 19, wherein the claim recites determining whether the host will make a derivation or not, which suggests that the method does not necessarily make a derivation whether a call is permissible or not. Therefore, as the claims are directed to a mere set of rules that are not necessarily used, and no useful, concrete, or tangible result is created.

As per claims 22-28, the claims are directed to allowing or disallowing a call based upon a configuration of the first said method with a hosting rule selected from a set of groups. However, if the first rule is selected (always allowing any said calls), the claim is simply directed to just always allowing calls to come in. In this instance, these claims merely describe not stopping things from occurring, and thus no useful, concrete, or tangible result is created.

As per claims 29-38, the claims are directed to intercepting calls and deriving whether a call is permissible or not. However, the claims are just directed to the

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intercepting and deriving, and no action is claimed upon after making such a derivation.

These claims do not create a useful, concrete, or tangible result.

As per claim 41, the claims are directed to a method of intercepting a call and deriving whether the call is permissible according to the host's prior configuration of a plurality of said managed callees. As seen through the claim limitations, the claims merely intercept a call and derive whether a call is permissible or not. Nothing is being done after the system makes a determination whether a call is permissible or not. Nothing is actively being done that creates any useful, concrete, or tangible result.

### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1, 5, 6, 9, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by the Applicant's Admitted Prior Art (hereinafter the AAPA, referring to paragraph numbers from the publication 2005/0172286)

As per claim 1, as best understood by the Examiner, the AAPA teaches in a host of a virtual machine environment having one or more methods in a shared managed library (paragraph 3, 5, 6), a process comprising allowing or disallowing a call from a first managed code caller to a first said method based upon a configuration of the first said method with a hosting rule (paragraph 7) selected from the group consisting of: always allow any said call from any said managed code caller to the first said method (paragraph 6); never allow any said call from any said managed code caller to the first said method due to the method's inappropriateness for the runtime environment (paragraph 7); and conditionally allow any said call from any said managed code caller to the first said method (paragraph 7).

As per claim 5, the AAPA teaches wherein when the call from the first managed code caller is allowed, access is provided by the first said method to a protected resource (paragraphs 5 and 6).

As per claim 6, the AAPA teaches wherein any said allowed call provides any said managed code caller with access to one or more protected resources corresponding to the called said method (paragraphs 5 and 6).

As per claim 9, the AAPA teaches configuring each said method in the shared managed library with one said hosting rule (paragraphs 5, 6, and 7).

Asd per claim 10, the AAPA teaches wherein each said method receives the configuring prior to any said call to any said method from any said managed code caller (paragraph 7)



***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 2, 3, 7, 8, 11-17, 19-24, 26-32, 34-38, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicant's Admitted Prior Art (hereinafter the AAPA, referring to paragraph numbers from the publication 2005/0172286), in view of Muhlestein et al. US Patent Application Publication No. 2002/0004815 (hereinafter Muhlestein).

As per claim 2, the AAPA teaches wherein the conditional allowance is based upon the method's required level of trust (paragraph 7). However, the AAPA combination does not explicitly teach wherein the conditional allowance is based upon a level of trust attributed to the first managed code caller. However, this is taught by Muhlestein, such as in paragraphs 44 and 45.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to combine the AAPA with the Muhlestein reference. One of ordinary skill in the art would have been motivated to perform such an addition to improve overall system safety and reliability. This is taught by Muhlestein in paragraph 43.

As per claim 3, the AAPA teaches compiling code corresponding to the first managed code caller into native code (paragraph 4); and executing the native code corresponding to the first managed code caller during which the call from the first managed code caller to the first said method native code is made (paragraph 4).

As per claim 7, Muhlestein teaches wherein the level of trust attributed to the first managed code caller corresponds to an identity of a provider of the first managed code caller (paragraphs 44 and 45).

As per claim 8, the AAPA teaches wherein the host compiles the first managed code caller into native code that is executed by a common language runtime (paragraphs 3 and 4). Executing a CLR via the host's operating system is taught throughout Muhlestein, such as in paragraph 6, 30, 31, 34, and 39.

As per claim 11, Muhlestein teaches determining whether the host will use any said hosting rule in allowing a call from any said managed code caller to any said method (paragraphs 43-45); and when the determination is affirmative, configuring one or more said methods in the shared managed library with one said hosting rule (paragraphs 43-45).

As per claim 12, as best understood by the Examiner, the limitations are taught in the AAPA in paragraphs 3-7, and also throughout Muhlestein, such as in paragraphs 43-46.

As per claim 13, the Muhlestein references teaches throughout the reference a computer readable medium including machine readable instructions, such as in paragraph 20.

Claim 14, as best understood by the Examiner, is rejected using the same basis of arguments used to reject claims 1, 2, 5, and 6 above. As seen in Muhlestein in paragraphs 44 and 45, calls are intercepted as the code is verified before the code can be granted permissions

Claim 15 is rejected using the same basis of arguments used to reject claim 5 above.

As per claim 16, Muhlestein teaches wherein the degree to which the host trusts the managed caller corresponds to an identity of a provider of the managed caller (paragraphs 44-45).

Claim 17 is rejected using the same basis of arguments used to reject claim 8 above.

Claim 19 is rejected using the same basis of arguments used to reject claim 11.

Claim 20, as best understood by the Examiner, is rejected using the same basis of arguments used to reject claim 12 above.

Claim 21 is rejected using the same basis of arguments used to reject claim 13 above.

Independent claim 22 is rejected using the same basis of arguments used to reject claims 1 and 13 above. Further, Muhlestein teaches providing an operating system in a native code portion in paragraph 6. Also, Muhlestein teaches a level of trust attributed to the managed code caller in paragraphs 43-45.

As per claim 23, Muhlstein teaches wherein the level of trust attributed to the managed code caller is based upon an identification of the provider of the managed code caller (paragraphs 43-45).

Claim 24 is rejected using the same basis of arguments used to reject claim 8 above. Further, this is taught by Muhlstein in paragraphs 60 and AAPA paragraphs 4-7.

As per claim 26, the references teach wherein the managed code portion further comprises one or more files associated with user code that, when compiled into an intermediate language code and metadata generated by a language compiler, are represented by one or more of said managed code callers (paragraphs 3-6 of AAPA and also paragraphs 5 and 60 of Muhlstein).

As per claim 27, the AAPA teaches wherein the execution engine means in the native code portion further comprises a compiler to compile each said managed code caller into native code for execution by the native code portion (paragraphs 3-5).

As per claim 28, the AAPA teaches a JIT compiler to compile each said managed code caller into native code; and a CLR loader to load the compiled native code for execution by the native code portion (paragraphs 3 and 4).

Independent claim 29 is rejected using the same basis of arguments used to reject claims 1, 14, and 22 above.

Claim 30 is rejected using the same basis of arguments used to reject claim 5 above.

Claim 31 is rejected using the same basis of arguments used to reject claim 7 above.

Claim 32 is rejected using the same basis of arguments used to reject claim 8 above.

Claim 34 is rejected using the same basis of arguments used to reject claim 11 above.

Claim 35 is rejected using the same basis of arguments used to reject claim 12 above.

Claim 36 is rejected using the same basis of arguments used to reject claim 26 above.

As per claim 37, the references teaches wherein the intermediate language code and metadata generated by the language compiler from one or more files each having a file type and being associated with user code (paragraphs 3-6 of AAPA and also paragraphs 5 and 60 of Muhlstein).

Claim 38 is rejected using the same basis of arguments used to reject claim 28 above.

Claim 41 is rejected using the same basis of arguments used to reject claims 1, 14, 22, and 29 above.

12. Claims 4, 18, 25, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over the the AAPA and Muhlestein reference as applied above, and further in view of Muhlesten US Patent Application Publication 2002/0108102 (hereinafter Muhl '102).

As per claim 4, as best understood by the Examiner, the AAPA and the Muhlestein reference do not explicitly teach throwing an exception during the execution when the call from the first managed code caller to the first said method native is made and: the call that is never allowed; the level of trust attributed to the first managed code caller is insufficient when compared to a security permission demand assigned to and required by the first said method. However, this is taught by Muhl '102, such as in paragraphs 15, 19, 43, 62, 64, 65, 76, and 86.

At the time of the invention, it would have been obvious to combine the Muhl '102 reference with the AAPA combination. One of ordinary skill in the art would have been motivated to perform such an addition to provide applications executing within a managed code environment easy access to instrumentation data that resides outside the managed code runtime (paragraph 11).

Claim 18 is rejected using the same basis of arguments used to reject claim 4 above.

Claim 25 is rejected using the same basis of arguments used to reject claims 4 and 18 above.

Claim 33 is rejected using the same basis of arguments used to reject claim 4 above.

### ***Conclusion***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason K. Gee whose telephone number is (571) 272-6431. The examiner can normally be reached on M-F, 7:00 am to 4:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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11/11/2008

/Kambiz Zand/

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